

1 1. A method comprising:

2 receiving, from an agent, a request to read data from a
3 read address in pre-fetchable data storage;

4 retrieving an initial amount of data determined by a
5 pre-fetch factor;

6 determining if the requesting agent received as much data
7 as it requested; and

8 based upon the determining, storing a next read address.

1 2. The method of claim 1 further comprising, before the
2 retrieving step, comparing the read address to a stored next
3 read address, and if they match, retrieving an amount of data
4 determined by both the pre-fetch factor and a re-read pre-fetch
5 factor.

1 3. The method of claim 2 further comprising changing the re-
2 read pre-fetch factor based upon the determining.

1 5. The method of claim 4 further comprising the step of
2 changing the re-read pre-fetch factor after an interval.

1 6. The method of claim 1 wherein the value of the pre-fetch
2 factor is alterable.

1 7. The method of claim 5 wherein the incrementing is
2 selectively enabled and disabled.

1 8. A system comprising:

2 a computer having at least one agent, at least one
3 bridge, a pre-fetch factor register, a re-read pre-fetch
4 factor register and a next read address register;
5 the bridge being configured to
6 (a) receive from an agent a request to read data from a
7 read address in pre-fetchable data storage;
8 (b) request an amount of data determined by a number
9 stored in the pre-fetch factor register;
10 (c) determine if the requesting agent has received the
11 full amount of requested data;
12 (d) based upon the determination, increment the re-read
13 pre-fetch factor register.

14 9. The system of claim 8 wherein the bridge is further
15 configured, based upon the determination, to store a next read
16 address.

17 10. The system of claim 9 further comprising the bridge
18 being configured to compare the read address to the stored next
19 read address, and if they match, changing the amount of data
20 determined also by the value in the re-read pre-fetch factor
21 register.

22 11. The system of claim 8 further comprising the bridge
23 further being configured to change the value in the re-read pre-
24 fetch factor register based upon the determining.

25 12. The system of claim 8 further comprising the bridge
26 further being configured to decrement the pre-fetch factor
27 register after an interval.

1 13. The method of claim 8 wherein the contents of the pre-
2 fetch factor register is alterable.

1 14. The method of claim 8 wherein the bridge is further
2 configured so as to be able to enable and disable the
3 application of the pre-fetch register and the re-read pre-fetch
4 register under control of the computer.

1 15. The system of claim 8 wherein the pre-fetch register is
2 contained within the bridge.

1 16. The system of claim 8 wherein the re-read pre-fetch
2 register is contained within the bridge.

1 17. A computer program product, disposed on a computer
2 readable medium, comprising instructions to cause a computer to
3 receive from an agent a request to read data from a read
4 address in pre-fetchable data storage;
5 request an amount of data determined by a number stored in a
6 pre-fetch factor register;
7 determine if the requesting agent has received the full
8 amount of requested data;
9 based upon the determination, store a next read address.

1 18. The computer program product of claim 17 further
2 comprising instructions to cause the computer to compare the
3 read address to the stored next read address, and if they match,
4 determine the amount of data requested also by the value in the
5 re-read pre-fetch factor register.

1 19. The computer program product of claim 17 further
2 comprising instructions causing the computer to increment the
3 re-read pre-fetch factor register based upon the determining.

1 20. The computer program product of claim 17 further
2 comprising instructions causing the computer to decrement the
3 pre-fetch factor register after an interval.

1 21. The computer program product of claim 17 wherein the pre-
2 fetch factor register, the re-read pre-fetch register and the
3 next read address are contained within a bridge.

1 22. The computer program product of claim 17 wherein the
2 instructions are stored in and implemented by a bridge.

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